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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-----------------|----------------------|----------------------------|------------------|
| 10/606,950 | 06/18/2003 | Reiner Hermann | HOE-762 | 3843 |
| 20028 | 7590 02/23/2006 | • | EXAMINER | |
| Lipsitz & McAllister, LLC | | | NGUYEN, TUAN VAN | |
| 755 MAIN ST MONROE, C | | | ART UNIT PAPER NUMBER 3731 | |
| | | | | |

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | ** | | |
|---|--|---|---------------------|--|--|
| | 10/606,950 | HERMANN, REIN | HERMANN, REINER | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Tuan V. Nguyen | 3731 | | | |
| The MAILING DATE of this communication | appears on the cover sheet | with the correspondence ad | ldress | | |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by s' Any reply received by the Office later than three months after the n earned patent term adjustment. See 37 CFR 1.704(b). | G DATE OF THIS COMMUI R 1.136(a). In no event, however, may n. eriod will apply and will expire SIX (6) M tatute, cause the application to become | NICATION. a reply be timely filed ONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 0 2a) This action is FINAL. 2b) 3) Since this application is in condition for allocations of closed in accordance with the practice und Disposition of Claims 4) Claim(s) 1-19 is/are pending in the application of the above claim(s) is/are with 5) Claim(s) is/are allowed. 6) Claim(s) 1-12 and 14-19 is/are rejected. | This action is non-final. bwance except for formal maler Ex parte Quayle, 1935 Continued the street of the street | | e merits is | | |
| 7)⊠ Claim(s) <u>13</u> is/are objected to. 8)□ Claim(s) are subject to restriction as Application Papers | nd/or election requirement. | | | | |
| 9) The specification is objected to by the Exam 10) The drawing(s) filed on 18 June 2003 is/are Applicant may not request that any objection to Replacement drawing sheet(s) including the co | e: a) \boxtimes accepted or b) \square ole the drawing(s) be held in abeomorection is required if the drawing | yance. See 37 CFR 1.85(a). ing(s) is objected to. See 37 C | FR 1.121(d). | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) ☑ None of: 1. ☑ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-946) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date 4/4/05. | Paper | ew Summary (PTO-413) No(s)/Mail Date of Informal Patent Application (PT | ⁻ O-152) | | |

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DETAILED ACTION

Claims 1-19 were examined and rejected by examiner Charles Sam in previous
 Office Action (Mailed out on January 4, 2005).

- According to the Response to the Office Action filed by Applicant on April 4, 2005,
 "Applicant notes that the Office Action did not include a signed copy of Applicant's
 PTO-1449 form" and "the Office Action Summary does not include an
 acknowledgement of Applicant's priority claim."
- The Examiner would like to confirm that Applicant's PTO-1449 will be considered and signed. Applicant's priority claim will be considered and acknowledged in the Office Action Summary (PTO-326 form).

Claim Objections

4. Claim 1 is objected to because of the following informalities: lines 2-3 state "a coupling member for establishing a rotary connection to a rotary drive **for** the drilling machine". Here it is understood that the applicant intended to recite "a coupling member for establishing a rotary connection to a rotary drive **in** the drilling machine". Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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- 6. Claims 1-4, 9-12, 14, and 16, are rejected under 35 U.S.C. 102(b) as being anticipated by Geistauts (U.S. 3,128,768).
- 7. Referring to claim 1, Geistauts discloses (see Figs. 1-2) a surgical drill comprises a drill bit 16 wherein the drill bit includes a shaft, a coupling member 17, a surrounding proximal sleeve 10 having proximal and distal end wherein the proximal sleeve is fixable in the drilling machine in the axial direction, a distal protective sleeve 12 surrounds the distal end of the drill bit and is insertable into proximal sleeve 10, and a spring 15 surround the drill bit 16 (see col. 1, line 55 to col. 2, line 9). Geistauts also discloses (see Figs. 5) a slightly modified form of the invention that has means for preventing the rotation of the proximal sleeve 10 relative to the rotation of drill bit 16 and drill support 17. The proximal sleeve is also capable of rotating about the longitudinal axis of the drill bit 16 or drill support 17 (see col. 3, lines 35-55).
- 8. Referring to claim 2, Geistauts discloses the drill 16 is adjusted relative to the drill support 17 therefore the distal sleeve is capable of mask the drill bit to beyond the tip (see col. 2, lines 29-32).
- 9. Referring to claim 3, it is rejected for the same reason as claim 1.
- Referring to claim 4, Geistauts discloses the support 17 and proximal sleeve 10
 (see Fig. 2) have mutually facing grooves inform of internal and external thread.
- 11. Referring to claim 9, it is rejected for the same reason as claim 1.

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12. Referring to claims 10, 11, Geistauts discloses (see Fig. 5) a recess 10G (see col.3, line 35-44) and stopping member 10A or cap.

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- 13. Referring to claim 12, Geistauts discloses (see Fig. 1-2) drill support portion 17C is the coupling member (see col. 2, lines 18-21).
- 14. Referring to claim 14, it is rejected for the same reason as claim 1.
- 15. Referring to claim 16, Geistauts discloses the distal sleeve 12 is prevented from rotation (see col. 2, lines 44-46).
- 16. Claims 15 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Geistauts (U.S. 3,128,768).
- 17. Referring to claim 15, Geistauts discloses a helical spring except for the spring comprises an end winding which extends transversely relative to the longitudinal axis. Here it is noted that helical spring claimed by the applicant is known as a helical spring with flat ends. Here it is noted that this kind of helical spring is well known in the art therefore it would have been obvious a design choice.
- 18. Referring to claim 17, Geistauts discloses the distal sleeve 12 is prevented from rotation (see col. 2, lines 44-46) therefore it would have been obvious a design choice to design the outside diameter of the distal sleeve with a non-round features in the cross-section and the proximal sleeve also having complementary opening for receiving the distal sleeve. Adding weight to examiner's opinion, Einhorn et al. (U.S. 4,782,833) discloses a non-round cross-section feature (see

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Figs. 7).

Claim Rejections - 35 USC § 103

- 19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 20. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 21. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geistauts (U.S. 3,128,768) further in view of Molinari (U.S. 4,535,658).
- 22. Referring to claim 5, Geistauts discloses the invention substantially as claimed except for the proximal sleeve and the shaft of the drill bit comprise mutually facing open peripheral grooves in which there engages a bearing element. Molinari discloses a socket 1 or sleeve and tool bit 3 or drill bit comprise mutually facing open peripheral grooves 5, 11 in which there engages a split ring 17 or bearing

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element (see Figs. 2 and 3, and col. 1, line 40 to col. 2, line 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made by the applicant to use the design of a socket bit holders arranged for receipt of a tool bit, as disclosed by Molinari, to incorporate into the device of Fig. 5, as disclosed by Geistauts in Figure 5 because this will provide a quick-connect or quick-disconnect of the drill support 17 and drill bit.

- 23. Referring to claims 6 and 7, they are rejected for the same reason as claim 5.
- 24. Claim 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geistauts (U.S. 3,128,768) further in view of Hogan (U.S. 5,59,7275).
- 25. Referring to claim 8, Geistauts discloses the invention substantially as claimed except for a radial projection of the proximal protective sleeve which engages in a recess in the drilling machine. Hogan discloses (see Figs. 1, 5 and 8) a tool with changeable working tip having a sleeve 56 wherein sleeve 56 includes radial projection tabs 72 engage in a recess in the drilling machine (see col. 5, line 23 to col. 6, line 22). It would have been an obvious to a person of ordinary skill in the art at the time of the invention was made by the applicant to use the radial projection pad 72, as disclosed by Hogan, to incorporate into the sleeve 10, as disclosed by Geistauts, because this will provide a quick changeable connection and a positive stop to prevent the sleeve 10 rotating relative with respect to the drilling device.
- 26. Claim 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geistauts (U.S. 3,128,768) further in view of Herbert (U.S. 6,096,042).

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27. Referring to claim 18, Geistauts discloses the invention substantially as claimed except for the distal protective sleeve carries a depth scale. Herbert discloses (see Figs. 11 and 18) a distal protective sleeve carries a depth scale (see col. 9, line 67 to col. 10, line 15). It would have been an obvious to a person of ordinary skill in the art at the time of the invention was made by the applicant to use depth scale, as disclosed by Herbert, to incorporate into the device, as disclosed by Geistauts, because this will provide a visual indication as to the effective penetration depth of the drill.

- 28. Claim 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geistauts (U.S. 3,128,768) further in view of Siegel (U.S. 3,358,826).
- 29. Referring to claim 19, Geistauts discloses the invention substantially as claimed except for the frictional slip ring on the distal sleeve. Siegel discloses (see Figs. 2-5) a disc-like stop member 12 or frictional slip ring on a reamer for accurately limiting the depth of the reaming operations (see col. 1, lines 53-55 and col. 2, lines 56-58). It would have been an obvious to a person of ordinary skill in the art at the time of the invention was made by the applicant to use stop member, as disclosed by Siegel, to incorporate into the device, as disclosed by Geistauts, because this will provide a positive stop for limiting the depth of the penetration of drill bit.

Allowable Subject Matter

30. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

31. Applicant's arguments filed on April 4, 2005 with respect to claims 1-11 have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Nguyen whose telephone number is 571-272-5962. The examiner can normally be reached on M-F: 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AnhTuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan V. Nguyen February 16, 2006

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SUPERVISORY PATENT/EXAMINER

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